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EXAMINER

SHANNON, MICHAEL R

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,306

Applicant(s)

ROGERS ET AL.

Examiner

Michael R. Shannon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 19-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 19-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 0200 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10 May 2005 have been fully considered but they are not persuasive.

The arguments relate to the rejection of claims 1, 3-9, 17-19, and 21 under 35 USC 102(e) as being anticipated by Cameron (WO 99/63759). Specifically, the Applicant argues "claim 1 (as amended) recites the limitation, 'transmitting non-video data **related to the video content program** to the user computers and displaying it on the user computers **contemporaneously with the video content program**.'" The Applicant states, "the claim makes it clear that the non-video data of the claimed invention is related to the video content program and is displayed contemporaneously with the related video content programming", and contends that "Cameron does not teach or disclose whether these services [such as the IPG] are related to the video content program being viewed. Nor does Cameron teach or disclose contemporaneously displaying the non-video data with the video data." In response to this argument, the Applicant is directed to page 9, line 31 through page 10, line 4, wherein Figure 8 is discussed. Figure 8 illustrates a second example of an IPG including a program detail banner containing information representing a highlighted channel. In this example, a highlighted channel is chosen and clicked on (meeting the "object button", to be discussed below) by the user and additional information is displayed in the program detail banner. The highlighted channel is "Real-Time Broadcast Video" and the program detail banner is non-video content that is related to

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the video and displayed concurrently with the video. Therefore, the Cameron reference does, in fact, meet this newly added limitation in the claim, and the prior art of record is therefore not overcome by this newly added limitation.

The next argument relates to the rejection of claim 5. The Applicant states, "The examiner equated the 'icon' of the quoted excerpt [Cameron, p. 13, lines 28-33] to the 'object button associated with an object in the content program' recited in examined claim 5. However, it is clear that the Cameron icon is associated with a message, not an object in the content program. Further, nothing in Cameron related the messages to the content programming." This is true, however, the Examiner gave the 'icon' as an example of on-screen display functionality. It can also be noted that the 'icon' could read on the highlighted channel (as discussed above), which can be selected to show additional non-video information related to the video. Therefore, the "highlighted channel" can be drawn to read on the "object button" more precisely than the aforementioned "icon". While the icon does exhibit some of the functionality required of the claim language, it does fall short in that the information resulting from the icon selection is not specifically related to the programming content. The "highlighted channel" and the additional information displayed upon its selection do, however, meet the claimed "object button responsive to a means of user selection".

Furthermore, to serve as another example of video content and non-video content being related and observed concurrently to one another, the Cameron reference discloses the viewing of a related web page and video concurrently. Page 15, lines 19-26 disclose channel hotlinks, which can also read on the "object buttons". The channel

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hotlinks can be actuated in order to activate a transfer to a dynamic web page. The web page could display information on the program or on the subject matter **currently** being shown. The system could also provide links to related topics of interest. The information being displayed on the web page can be displayed with the subject matter currently being shown, as the word "currently" suggests. Therefore, the Cameron reference gives yet another example that meets the newly added claim limitations.

The Applicant states, on page 16 of the Remarks, "The IPG implemented by Cameron has no direct association with the video programming and does not, therefore, teach the interactivity claimed in the original claims or in the claims as amended." This, in fact, is untrue. As can be seen in Figure 8 and as is discussed above, the IPG and the video content are very strongly related and are displayed concurrently with each other. Therefore, the Examiner maintains his opinion that the IPG implemented by Cameron does have association with the video programming.

The Application argues the rejection to claim 19 in much the same way that the rejection to claim 1 was argued. The arguments are not persuasive for the same reasons as discussed above with regards to claim 1. Also, as can be seen below, new independent claim 27 is rejected under much the same terms as independent claims 1 and 19.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-9, 19, 21-27, and 29-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Cameron et al (WO 99/63759).

Regarding claim 1, the claimed method for multi-casting video content to a user computer is met as follows:

- The claimed step of distributing a video content program from a content center to a regional data center via an open network is met by page 6, lines 2-10, wherein the Cameron reference discloses a satellite located at the head-end to receive content video signals [Fig. 2] from a content provider over satellite 12 (satellite transmission being that of an open network).
- The claimed step of distributing the video content program from the regional data center to a user computer via a distribution network according to a multi-cast protocol is met by page 6, lines 5-20, wherein the Cameron reference discloses an IP multicast broadband network for distributing the encoded video signals.
- The claimed step of transmitting non-video data related to the video content program to the user computer is met by page 8, lines 5-23, wherein the Cameron reference discloses the transmission of interactive

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TV, Web Browsing, Web-based Email, IPG, VOD and pay-per-view services through the DTVM interface. Also, according to the arguments above, the claim is met by the additional information discussed on page 9, line 31 through page 10, line 4 and the web page discussed on page 15, lines 19-26.

- The claimed step of displaying the non-video data on the user computer contemporaneously with the video content program is met by the additional information discussed on page 9, line 31 through page 10, line 4 and the web page discussed on page 15, lines 19-26, as discussed in the response to arguments section above.

Regarding claim 3, the claimed open network being selected from the group consisting of a satellite network, a terrestrial wireless network, a cable network, and a fiber optic network is met by the discussion, on page 6, line 32 – page 7, line 2 of the use of satellite and off-air broadcasts to transmit the television broadcast signals to the head-end.

Regarding claim 4, the claimed distribution network being selected from the group consisting of a satellite network, a terrestrial wireless network, a cable network, and a fiber optic network is met by the discussion, on page 6, lines 8-20, wherein the Cameron reference discloses the use of ADSL, HFC, FTTC, or wireless service as a distribution multicast network.

Regarding claim 5, the claimed method of multi-casting video content of claim 1, wherein the distribution network is interactive and wherein the non-video data

comprises an object button responsive to a means of user selection, and wherein the object button comprises a link associated with an object selected from the group consisting of a program-related video game, a program-related advertisement, a program-related service, and a program-related merchandise is met by the above discussions of the "highlighted channel" selection and the "channel hotlink" selection. The above response to arguments section outlines this rejection in thorough detail.

Regarding claim 6, the claimed method of multi-casting video content of claim 1, wherein the non-video data related to the video content is selected from the group consisting of a program-related video game, a program-related advertisement, a link to program-related information, a program-related service, and program-related merchandise is, again, met by the discussion of the "highlighted channel" or the "channel hotlink" that provide further information regarding the selected and currently viewed program. The above response to arguments section outlines this rejection in thorough detail.

Regarding claim 7, the claimed "method for multi-casting video content of claim 5, wherein the method further comprises: generating, at the user computer user data corresponding to selection of the object button; receiving the user data at the regional data center via the distribution network; processing the user data; and sending a response to the user computer via the distribution network" is met by the above discussion of the selection of the related web page using the channel hotlinks. The user selects the hotlink then the network sends the web page to the user device for display with the currently viewed program. Also, the discussed "highlighted channel" meets the

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claim as well. The above response to arguments section outlines this rejection in thorough detail.

Regarding claim 8, the claimed "wherein the response to the user comprises execution of the link to the object" is met by page 9, line 31 – page 10, line 4, wherein the Cameron reference discloses the clicking of a highlighted selection, which displays further information regarding the selection. The claimed user data reflecting the user's selection of the object button is met by the clicking action and the user's selection by highlighting. The claimed response to the user comprising the information data is met by the return of "relevant data concerning program content and time remaining..." Also, as is discussed above in the response to arguments section, the channel hotlinks that return a web page related to the video and the highlighted channel that returns further information related to the video read on the claim. The above response to arguments section outlines this rejection in thorough detail.

Regarding claim 9, the claimed method for multi-casting video content of claim 7, wherein the object associated with program-related services and program-related merchandise comprises means for the user to purchase program-related services and program-related merchandise is met by the ability, within the IPG, to select pay-per-view movies [page 9, lines 4-10] via the grid object buttons. The claimed user data reflecting the user's selection of the object button is met by the by the clicking action and the user's selection by highlighting. The claimed response to the user comprises the offer is met by the system's ability to deliver pay per view movies based on user selection through the IPG.

Regarding claim 19, the claimed system for multi-casting video program content and non-video data over a distribution network is met as follows:

- The claimed video program content is met by the television broadcast signals from various sources [page 6, line 33].
- The claimed non-video data contextually related to the video program content is met by the IPG information [page 9, lines 9-23], which is related to the video program content in that it provides an interactive schedule. Also, all of the claimed features of the DTVM which serve to make the system interactive, such as the "brief information banners" [page 9, lines 31-33], the Web Browsing, Web-based e-mail, VOD, and pay-per-view services, which all relate to the video program content [page 9, lines 5-9].
- The claimed multicasting computer is met by the head-end, which serves to receive video content from the video sources 12, convert it to multicast IP format and distribute it over the distribution network to the end users [page 6, line 32 – page 7, line 5]. The components (processor, storage means, and memory) are all met inherently by the teaching of the computer. Every generic computer has at least these three components, therefore, the teaching of the head-end inherently meets the claimed components.
- The claimed steps accomplished by the multicasting computer to receive the video program content, receive the non-video data, distribute the video content program via a distribution network according to a multi-cast

protocol, and transmit the non-video data contemporaneously with the video program content over the distribution network is met by the head-end's ability to receive video and non-video data over satellite link video source 12 [page 6, lines 2-10], then distributing the video data in multicast IP format over the distribution network, and finally transmitting the non-video data such as IPG and other interactive features (as discussed above in the response to arguments section) over the distribution network at the same time via the distribution network.

- The claimed user computer adapted to display the non-video data contemporaneously with a display of the video program content is met by the additional information discussed on page 9, line 31 through page 10, line 4 and the web page discussed on page 15, lines 19-26, as discussed in the response to arguments section above.

Regarding claim 21, the claimed distribution network being selected from the group consisting of a satellite network, a terrestrial wireless network, a cable network, and a fiber optic network is met by the discussion, on page 6, lines 8-20, wherein the Cameron reference discloses the use of ADSL, HFC, FTTC, or wireless service as a distribution multicast network.

Regarding newly added claims 22-26, see the above rejections to claims 5-9, respectively.

Regarding newly added claims 27 and 29-35, see the above rejection to claims 1 and 3-9, respectively.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 20, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al (WO 99/63759).

Regarding claim 2, the claimed method for multicasting video content is met by Cameron et al in claim 1. Cameron et al, does not, however, specifically teach that the multi-cast protocol used is the Internet Group Management Protocol (IGMP) and class D addressing with private multi-cast addresses. However, the examiner takes Official Notice as to the fact that the IGMP protocol with class D addressing is well known in the art. The IGMP protocol is the standard protocol for multicast sessions and allows membership in particular multicast groups on a single network. Private class D addressing simply allows for IP addresses in the range of 244.0.0.0 – 239.255.255.255, which is also commonly known in the art. The examiner therefore submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the IGMP protocol with class D addressing in order to comply with regularly accepted standards for establishing and maintaining a multicast distribution network.

Regarding claim 20, the claimed system for multi-casting video content program and data content over a distribution network is met by Cameron et al in claim 19.

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Cameron et al, does not, however, specifically teach that the multi-cast protocol used is the Internet Group Management Protocol (IGMP) and class D addressing with private multi-cast addresses. However, the examiner takes Official Notice as to the fact that the IGMP protocol with class D addressing is well known in the art. The IGMP protocol is the standard protocol for multicast sessions and allows membership in particular multicast groups on a single network. Private class D addressing simply allows for IP addresses in the range of 244.0.0.0 – 239.255.255.255, which is also commonly known in the art. The examiner therefore submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the IGMP protocol with class D addressing in order to comply with regularly accepted standards for establishing and maintaining a multicast distribution network.

Regarding newly added claim 28, the claimed method for multi-casting video content is met by Cameron et al in claim 27. Cameron et al, does not, however, specifically teach that the multi-cast protocol used is the Internet Group Management Protocol (IGMP) and class D addressing with private multi-cast addresses. However, the examiner takes Official Notice as to the fact that the IGMP protocol with class D addressing is well known in the art. The IGMP protocol is the standard protocol for multicast sessions and allows membership in particular multicast groups on a single network. Private class D addressing simply allows for IP addresses in the range of 244.0.0.0 – 239.255.255.255, which is also commonly known in the art. The examiner therefore submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the IGMP protocol with class D addressing in order to

comply with regularly accepted standards for establishing and maintaining a multicast distribution network.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon who can be reached at (571) 272-7356 or Michael.Shannon@uspto.gov. The examiner can normally be reached by phone Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Alexandria, VA 22314

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
July 21, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
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